

Virginia Title V Operating Permit

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Newport News Shipbuilding and Dry Dock Company

Facility Name: Newport News Shipbuilding and Dry Dock Company
Facility Location: 4101 Washington Avenue
Newport News, Virginia

Registration Number: 60153
Permit Number: VA-60153

July 28, 2003

Effective Date

October 28, 2007

Expiration Date

(for) _____

Robert G. Burnley
Director, Department of Environmental Quality

July 28, 2003

Signature Date

Permit Conditions, 67 pages

**NEWPORT NEWS SHIPBUILDING AND DRY DOCK COMPANY TITLE V OPERATING
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I. Facility Information

Permittee

Newport News Shipbuilding and Dry Dock Company
4101 Washington Avenue
Newport News, Virginia 23607

Facility

Newport News Shipbuilding and Dry Dock Company
4101 Washington Avenue
Newport News, Virginia 23607

Responsible Official

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AIRS Identification Number: 51-700-00013

Facility Description: Newport News Shipbuilding and Dry Dock Company (NNSB) owns and operates a major ship construction and overhaul facility in Newport News, Virginia. The facility is classified as a major source for criteria and hazardous air pollutant emissions from its various operations. It is therefore subject to Title V operating permit requirements. The facility operates under Standard Industrial Classification (SIC) Code 3731. Products manufactured include U.S. Navy contracted aircraft carriers and submarines, as well as ships for commercial applications such as oil tankers and service ships. Services performed at the facility include all activities related to the repair, overhaul, and conversion of ships. The facility is broken up into several operational segments as follows:

Fuel Burning Equipment - NNSB operates several boilers and other pieces of combustion equipment on site. The main steam plant consists of three units fired with No. 6 fuel oil and/or recovered oil. The three steam generating units are each rated at 135 mmBtu/hour. The facility also houses nine other boilers of significant size. Each of the other nine boilers is fired with liquid or gaseous fuels and emissions are uncontrolled. The facility uses a number of diesel-fired emergency generators ranging in size from just over 1000 kilowatts to less than 100 kilowatts. They are operated for approximately one-half hour per month for maintenance purposes and less than 500 hours per year total per engine. Diesel-fired air compressors are used throughout the facility for various blasting and painting activities. NNSB owns approximately half of these units. The remaining units are leased on an as-needed basis.

Foundry Operations - Alloy steels, copper-nickel, aluminum, brass, and other non-ferrous alloys can be produced at the facility foundries for a full range of castings necessary for the construction/repair of ships. Foundry operations generally include the following processes: melting, casting, finishing, and sand handling. Alloying agents and fluxing materials are added to the furnaces as needed for a given casting type.

The molten metal is poured into sand molds, allowed to cool, and the castings are separated from the molds at shakeout. The sand is recovered while the castings move to the finishing area. Finishing involves removal of extraneous metal by burning-off, blasting, and grinding. The facility also has a pattern shop to develop and refine the large and complex patterns for such castings as struts, rudders, stern frames, valves, compressor castings, pipes, etc. The sand handling system includes unloading of sand into storage silos, mixing of sand with resin, transferring the sand to machines for the production of molds or cores, and collecting the return sand from the shakeout area. Sand molds provide the exterior shape of the casting. Cores are used for specific internal voids (for example, recessed curves and hollow areas). The foundry uses three electric arc furnaces (EAFs) and one argon/oxygen-degassing furnace (AOD). The latter is fired with propane as is the core sand dryer. The small brass foundry uses electric induction furnaces for metal melting.

Steel Preparation and Fabrication Operations - Blasting and coating of steel units are conducted in a blast and coat facility that has computer-controlled temperature and humidity to prevent "flash rust" corrosion on freshly blasted surfaces. The steel units being blasted and coated include plates, I-beams, and other "shapes". After shot blasting the modules, at the facility rail lines carry plates to the fabrication and/or production facilities. Emissions are primarily particulate matter and are exhausted to a baghouse.

Steel plates of varying thickness and sizes are rolled and shaped in the steel production facility. Operations include flame cutting, grinding/shearing, cold and hot forming, planing/milling, punching/drilling, and sawing. The Steel Production facility is an eleven acre complex for the fabrication of structural steel, ranging from small components to complex 300-ton ship subassemblies. Operations include plate preparation, flame planers, automated panel line, web lines, numerically controlled burning machines, flat and curved block shops, and machinery for assembly of circular hull plates. Plate preparation includes some shot blasting and heating to prepare the surface for the next step in the process, painting. In addition, blast units called "toe blasters" are located inside various building at the facility (including buildings 1831, 1745, 276, and 263). Each blast unit vents to a dust collector that exhausts within the structure, so no emissions are anticipated. No Title V reference numbers have been assigned to these units.

Secondary Lead Processing - This facility makes lead shielding plates for reactor spaces and personal protection. For this process, only pure lead ingots are utilized. The process involves the preheating of the ingots prior to melting in furnaces. The metal is then contoured at hot benches and finished using radiant heaters. There are three process lines contained within the building (4582). The facility uses propane to fire this equipment. In response to new designs for ship modules, NNSB will conduct some casting of ship sections in Building 250 immediately adjacent and connected to Building 4582. Covered crucibles of melted lead will be moved by forklift from Building 4582 to Building 250, a distance of less than 200 feet. The melted lead will be poured into ship sections under ventilated hoods that exhaust to the outside through cartridge-type pre-filters and HEPA final filters designed for 99.9% efficiency. NNSB does not anticipate any increase in lead production and estimates that controlled emissions of particulate will be 1.0 pounds per year and controlled emissions of lead will be 0.2 pounds per year.

Woodworking Operations - Woodworking operations associated with the facility's primary function, shipbuilding, generally occur at two locations. Building No. 3 primarily makes pallets, boxes, and shoring timbers. Equipment used includes moulders, surfacers, saws, planers, lathes, boring machines and drills, shapers, and joiners in various sizes. The model shop is a smaller facility (2,400 square feet) used for fabrication of ships from wood, plastic, or Plexiglas. Full-scale models of these

materials are used as training aids, for demonstrations, or for verification of design.

Wood is also used to make some mold patterns on the second floor of Building 501 and produce pallets and shipping containers at Building 513.

Electroplating - The electroplating plant performs chrome, silver, zinc, cadmium, lead, copper, and nickel plating, chemical cleaning, pickling, stripping, buffing, and polishing. Chemical cleaning, pickling, stripping, buffing, and polishing are part of the cleaning and preparation of a substrate such as metal for electroplating. The electroplating process itself is the application of a metallic coat to a surface by passing an electric current through an electrolyte to form a surface with different properties than the original. The electrolyte is usually an aqueous solution of the salts of the metal being applied. Electroplating provides improved corrosion resistance, appearance, frictional characteristics, wear resistance and hardness, and specific electrical properties for ship hardware and parts.

Painting/Coating Operations - Painting/coating operations associated with the facility's primary function, shipbuilding, occur at various locations throughout the facility. Paint booths are located in the fabrication areas and numerous shops (e.g., machine, electric, and hull outfitting). Brush, roller, and touch-up applications occur in many operational areas. Outside painting occurs in areas such as dry docks, assembly platens, Quonset huts, in the open, under extemporaneous or semi-portable cover, inside, and outside of buildings. Paints are generally purchased in small containers (1 to 5 gallons) and then mixed (thinned, if needed) in 5 to 10-gallon paint pots. These pots feed spray gun applicators. In Buildings 274, 275, and 1746, pressurized totes ranging in capacity from 200 to 400 gallons are used. These units are closed-loop to minimize emissions. Unit cleaning is also done in the closed-loop mode. Thinners are purchased in 55-gallon containers. By utilizing relatively small containers rather than large storage tanks, NNSB can more effectively meet customer requirements and control quantities of potentially VOC and HAP-containing materials at the facility. The facility also houses a powder coating operation in Buildings 205 and 206.

Specialty Shops - Machine shops are located at various locations at the facility. Work at the various machine shops involves metal cleaning, machining, and fabrication of large plates, smaller parts, pipe cutting, and similar activities. Several buildings house very large lathes and milling equipment for turning large metal plates and other large parts. Particulate emissions from grinding and buffing of metal surfaces are exhausted to cyclones. In addition, the Main Machine Shop conducts hydraulic, hydro, air, or steam tests for all sizes of valves and large components. Dynamic balancing is performed on large rotors and ship propulsion shafting as well as most rotors (motors, turbines, and pumps) removed from ships. Piping is fabricated and assembled at the pipe fabrication facility. Equipment includes horizontal boring mills, standard and radial drill presses, lathes, automatic welding machines, standard pipe bending machines, a variable radius pipe roller-bender, and pipe threaders. Metal machining and surface preparation are also performed at the pipe fabrication facility. The main electrical shop is also located in this portion of the facility. A Baron Blakeslee vapor degreaser is used in the electrical shop for parts cleaning. It has been modified for the use of the non-HAP n-propylbromide. This substance is not included in the halogenated solvents subject to 40 CFR Part 63 Subpart T - National Emissions Standards for Halogenated Solvent Cleaning. An enclosed, controlled arc gouging process is also in existence at the facility.

Storage Tanks - Storage tanks ranging in size from <1,000 gallons up to 60,000 gallons are located at the facility. Most tanks are used for storage of petroleum related materials including fuel oil, diesel fuel, waste oil, and oily wastewater. Some process related storage tanks are pressurized, e.g., varnish tanks. Totes (200 to 400 gallons), 55-gallon drums, and pots (5 to 10 gallons) are used for painting activities. Two gasoline distribution areas or service stations are located within the shipyard. The

underground storage tanks serving these stations were upgraded within the last five years and include one 10,000-gallon tank and two 6,000-gallon tanks. NNSB utilizes propane for heaters, dryers, and ovens. Three large (30,000-gallon) storage tanks and one 70,000-gallon tank are used to supply these units. Natural gas is also used in some areas of the yard and is supplied by outside commercial suppliers through trunk lines.

Miscellaneous Activities - Other miscellaneous activities at the source with potential emissions include ovens and dryers, abrasive blasting, facility-wide solvent usage, facility-wide welding/brazing, facility-wide gluing, ship mock-ups, wastewater treatment, asbestos handling, shipboard foam installation applications, vessel cleaning, radionuclides, general plant activities (painting, welding, sandblasting, general carpentry, parts cleaning, vehicle maintenance, offset printing, blueprinting, copying, and firefighting), and research and development activities.

II. Emissions Unit Specific Requirements

A. Insignificant Emission Unit Inventory List

Emission Unit No.	Emission Unit Description	Citation	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
103-E1	Shop, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
160-E1	Tool Room & Office, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
1744-E2	Detroit Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	979 horsepower
1744-E3	Utility Substation Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	469 horsepower
1744-E4	Natural gas-fired boiler	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	2,343 mmBtu/hr
1744-E5	Natural gas-fired boiler	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	2,343 mmBtu/hr
23-E1	Hull Outfitting & Electrical Shops, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
2-E1	Consolidated Storage, Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
4538-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,048 horsepower
4632-E1	Radcon Control Firehouse, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	324 horsepower
4677-E2	MOF, South, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	80 horsepower
4677-E3	MOF, North, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67 horsepower
4677-E4	MOF, East, Detroit Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	47 horsepower
520-E1	Office, Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67 horsepower
521-E1	Computer & Materials Support, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	603 horsepower
521-E2	Computer & Materials Support, Solar Gas Turbine (diesel-fired for emergency use)	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,073 horsepower
86-E1	Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	235 horsepower
DD10/11-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	469 horsepower
DD12-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	757 horsepower
DD3/4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
DD3-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	335 horsepower
DD3-E2	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	335 horsepower
DD4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	208 horsepower

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DD4-E2	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	208 horsepower
FTSF-E3	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	670 horsepower
GEN-E1	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
GEN-E10	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	282 horsepower
GEN-E11	Fire Dept. #1-port, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	268 horsepower
GEN-E12	Fire Dept. #2-port, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	268 horsepower
GEN-E13	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	188 horsepower
GEN-E14	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	168 horsepower
GEN-E15	Diesel-fired Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	168 horsepower
GEN-E16	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	80 horsepower
GEN-E2	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
GEN-E17	Communications Tower, Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	282 horsepower
GEN-E18	Portable, Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	282 horsepower
GEN-E19	Scrap Yard Fuel Storage Facility, Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	46.9 horsepower
GEN-E20	Ring Module Shop, Denerac Diesel Generator Set	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40.2 horsepower
GEN-E21	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	978.9 horsepower
GEN-E22	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67.1 horsepower
GEN-E23	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67.1 horsepower
GEN-E24	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	11 horsepower
GEN-E25	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	11 horsepower
GEN-E26	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67.1 horsepower
GEN-E27	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40.2 horsepower
GEN-E28	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40.2 horsepower
GEN-E29	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
GEN-E3	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
GEN-E30	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
GEN-E31	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
GEN-E32	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67 horsepower

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GEN-E33	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	93.9 horsepower
GEN-E4	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	871.7 horsepower
GEN-E5	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	603.5 horsepower
GEN-E6	Cummins/Onan Diesel Generator Set	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	402 horsepower
GEN-E7	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	335 horsepower
GEN-E8	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	335 horsepower
GEN-E9	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	308 horsepower
PIER2-E1	Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	469 horsepower
SHED4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	737 horsepower
GEN-E34	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	47 horsepower
GENP-E1	Portable Generators Rated at equal to or greater than 14 kW	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	<12 horsepower
GEN4636-E2	Emergency Diesel Pump	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	740 horsepower
PUMP-E1	Cummins 6" Portable Emergency Diesel Pump	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	95.2 horsepower
PUMP-E2	Cummins 6" Portable Emergency Diesel Pump	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	95.2 horsepower
NAC-E1	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E2	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E3	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E4	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E5	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E6	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E7	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E8	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E9	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E10	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E11	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E12	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
550-E12	R.S. Products Co. Oven, Foundry Annealing	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	9.74 million Btu/hour, propane
550-E14	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.305 million Btu/hour, propane
550-E15	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.2 million Btu/hour, propane

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550-E16	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.7 million Btu/hour, propane
550-E17	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.7 million Btu/hour, propane
550-E18	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.7 million Btu/hour, propane
550-E6	Core Sand Dryer	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.4 million Btu/hour, propane
274-E2	Binks Dryer, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.9 million Btu/hour
274-E3	Binks Dryer, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.4 million Btu/hour
274-E4	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.88 million Btu/hour
274-E5	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.56 million Btu/hour
274-E6	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.56 million Btu/hour
274-E7	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.88 million Btu/hour
274-E8	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.562 million Btu/hour
274-E9	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.4 million Btu/hour
274-E10	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.4 million Btu/hour
274-E11	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.4 million Btu/hour
275-E1	Thermal Dryer, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	3.2 million Btu/hour
275-E2	Buffalo Forge - Shape Prep, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.88 million Btu/hour
275-E3	Buffalo Forge - Shape Prep, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.88 million Btu/hour
276-E5	Oven, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.58 million Btu/hour
1746-E1	Electrolux Paint Dryer - Plate Preparation	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	8.33 million Btu/hour
1746-E3	Oven, Plate Prep, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	8.33 million Btu/hour
4582-E7	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
4582-E8	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
4582-E9	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
4582-E10	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
4582-E11	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
17-E2	Super heater - Ship Repair Machine Shop	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.6 million Btu/hour

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60-E4	Curing Oven - Main Machine Shop (w/filter)	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.175 million Btu/hour
64-E3	Bayco Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1.0 million Btu/hour
205-E1	Oven - Ship Shed No. 3	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.214 million Btu/hour
4740-E1	Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.183 million Btu/hour
4702-EF2	Dryer	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1.1 million Btu/hour
205-C1a, 205-C1b, 205-C1c	Parts Washer Burners	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	One burner rated at 2.0 million Btu/hour and two burners rated at 1.3 million Btu/hour each
205-C2	Pre-heat Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	5.5 million Btu/hour
205-C3	Cure Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	5.5 million Btu/hour
206-C1	Heat Cleaning Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.6 million Btu/hour
4681-E1	Bake Oven at Phosphate Line	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	4.2 million Btu/hour
PLATE-E4	Chromium strip tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E5	Electrocleaner tank - Cd	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E6	Electrocleaner tank - Cu/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E7	Electrocleaner tank - Cr/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E8	Electrocleaner tank - Cr	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E9	Electropolisher tank - Cr/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E10	Chromic acid tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E11	Cadmium plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E12	Barrel cadmium plating	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E13	Zinc plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E14	Barrel zinc plating	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E15	Cyanide copper tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E16	Nickel plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E17	Nickel strip tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E18	Dull nickel plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA

PLATE-E19	Lead plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E20	Silver strike tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E21	Silver plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E22	Acid copper plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
SY-E1	Natural gas-fired boiler, Rite	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	0.48 million Btu/hr
621-E1	Natural gas-fired boiler, Kewanee	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	5.25 million Btu/hr
635-E1	Natural gas-fired boiler, Superior	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	1.6 million Btu/hr
4768-E1	Natural gas-fired boiler, Burnham	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	2.8 million Btu/hr
4768-E2	Natural gas-fired boiler, Burnham	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	2.8 million Btu/hr
17-E1	Propane-fired test boiler, Singer Vapor	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	2.73 million Btu/hr
521-E1	Natural gas-fired boiler, Aerco	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	2.0 million Btu/hr
521-E2	Natural gas-fired boiler, Aerco	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	2.0 million Btu/hr
521-E3	Natural gas-fired boiler, Aerco	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	2.0 million Btu/hr
521-E4	Natural gas-fired boiler, Aerco	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	2.0 million Btu/hr
521-E5	Natural gas-fired boiler, Aerco	5-80-720 C.2.a	CO, NO _x , SO ₂ , VOC, PM10	2.0 million Btu/hr

Title V Insignificant Unit Tanks Inventory List

Tank Number	Contents	Capacity (gallons)	Year Installed
A109	Tectyl 891	8,500	Portable
A203	Diesel	6,000	1990
A208	Diesel	300	1991
A209	Diesel	1,000	1993
A210	Diesel	1,000	1993
A211	Diesel	180	1972
A212	Diesel	270	1982
A218	Diesel	3,000	1995
A219	Diesel	1,000	1995
A220	Diesel	2,200	1996
A221	Diesel	1,000	2001
A301	Recd Oil	19,827	1985
A302	Recd Oil	19,827	1985
A401	Oily waste	60,000	1985
A402	Oily waste	60,000	1985
A403	Oily waste	8,310	1985
A508	Diesel	530	1995
A509	Diesel	530	1995
A510	Diesel	530	1995

A511	Diesel	270	1995
A512	Diesel	270	1995
A513	Diesel	270	1995
A514	Jet fuel	2,000	Portable
A601-A635	Oily waste	910 each	Portable
V706*	Diesel	500	1985
V707*	Oily waste	10,000	1985
U209	Diesel	1,500	1984
U217	Diesel	6,000	1976
U219	Diesel	5,000	1976
U232	Diesel	1,000	1993
U233	Diesel	1,000	1993
U305	Gasoline	6,000	1979
U306	Gasoline	10,000	1991
U500	Hydraulic	6,000	1979
U502	Motor oil	6,000	1979
U503	#6 fuel	500,000	1970
U504	#6 fuel	171,400	1976
U505	#6 fuel	171,400	1976
U508	Oily water	10,000	1980
U510	Oily water	500	1981
U511	Oily water	48,000	1981
U512	Oily water	20,000	1983
U513	Oily water	20,000	1984
U514	Oily water	30,000	1985
U517	Oily water	550	1975
U518	Oily water	3,918	1988
U519	Oily water	3,918	1988
U600	Car Wash Tank	8,000	1979
SG401-424	**Govt. Furnished Liquid	18,000	1990
SG425	H2O2	2,000	1990
SG426	Overflow	1,200	1990
SG427	NH4OH	2,400	1990
SG428	Overflow	250	1990
SG429-431	**Govt. Furnished Liquid	6,000 each	1990
SG432	**Govt. Furnished Liquid	9,000	1990
SG433-434	**Govt. Furnished Liquid	18,000 each	1990
SG435-438	**Govt. Furnished Liquid	4,000 each	1990
SG439-440	Overflow	1,250	1990
SG441	Overflow	250	1990
SG442	Overflow	100	1990
SG443-446	Phosphate Water	18,000 each	1990
SG447-449	Portable PO4 Water	18,000 each	N/A
SG450	Portable PO4 Water	6,000	N/A
SG451	Dilute KCr	22,000	Unknown

*Tanks on floating test barge 'Vessel' but supplying permitted source.

**Confidential formula (non-petroleum).

1985 - Bold italics indicate that tank was **constructed** prior to July 1984.

B. Significant Emissions Unit Inventory List

1. Process Units

Emission Unit No.	Stack No	Unit Name/Description and Date of Construction	Size/Rated Capacity Units
550-E1	550-S1	Argon/Oxygen Degassing Furnace	30 tons/hr or 60,000 lbs/hr
550-E2	550-S2	Electric Arc Furnace No. 1	7.5 tons/hr or 15,000 lbs/hr
550-E3	550-S2	Electric Arc Furnace No. 2	25 tons/hr or 50,000 lbs/hr
550-E4	550-S2	Electric Arc Furnace No. 3	25 tons/hr or 50,000 lbs/hr
550-EF3	550-EF3	Riser Burn Area	30 tons/hr or 60,000 lbs/hr
550-E6	550-S6	Core Sand Dryer	10,000 lbs/hr or 1.4 mmBtu/hr
550-E8	550-S8	Heat Treating Oven	10,000 lbs/hr or 15.31 mmBtu/hr
550-E9	550-S9	Heat Treating Oven	10,000 lbs/hr or 23.22 mmBtu/hr
550-E10	Building vents	Abrasive Saw	12.5 tons/hr or 25,000 lbs/hr
550-E11	550-EF3	Sand Reclaim Operations	12.5 tons/hr or 25,000 lbs/hr
550-E12	550-S12	Riser Burn Area	30 tons/hr or 60,000 lbs/hr
550-E20	550-S20	Steel Shot Abrasive Blasting	30 tons/hr or 60,000 lbs/hr
550-E21	550-S21	Sawing Operations	30 tons/hr or 60,000 lbs/hr
555-E1	550-EF3	New Sand Operations	100 tons/hr or 200,000 lbs/hr
274-E1	Building vents	Abrasive Shot Blasting	26.25 tons/hour
275-E5	Building vents	Abrasive Shot Blasting	2.5 tons/hour
276-E3	276-S6	Wire Brush Paint Removal	<0.02 tons/hour
288-E1 & E4	288-S1 and S2	Abrasive Blasting blast room and blasting area	2.5 tons/hour
288-E2	288-S3	Abrasive Blasting	2.5 tons/hour
288-E3	288-S3	Abrasive Blasting	2.5 tons/hour
1746-E2	1746-S2	Abrasive Blasting/Steel Shot	2.5 tons/hour
276-E3PC	Building vents	Plasma Cutting	<0.02 tons/hour
4582-E1	4582-S1, S2, and S3	Warwick Lead Melting Furnace, Model No. 550	1 ton/hour
4582-E2	4582-S1, S2, and S3	Warwick Lead Melting Furnace, Model No. 550	1 ton/hour
4582-E3	4582-S1, S2, and S3	Johnson Preheat Station, Johnston Manufacturing Co.	1 ton/hour
4582-E4	4582-S1, S2, and S3	Johnson Preheat Station, Johnston Manufacturing Co.	1 ton/hour
4582-E5	4582-S1, S2, and S3	Lead Contouring Hot Bench	1 ton/hour
4582-E6	4582-S1, S2, and S3	Lead Contouring Hot Bench	1 ton/hour
LS-E1	-	Lead School (training)	NA
3-E1	3-S1	Cutting/Planer/Re-saw	NA

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501-E2	501-S2	Foundry Pattern Shop - wood cutting machines	NA
513-E1	513-S1	Warehouse No. 6 Saws	NA
PLATE-E1	PLATE-S1	Hard chromium electroplating tank	129 ft ³ /hour
PLATE-E2	PLATE-S1	Decorative chromium electroplating tank	32 ft ³ /hour
232-E1, E2	232-1S1 through 232-1S6, 232-2S	Consolidated Paint Facility, paint booths (2)	NA
4681-E2	4681-2S	Metal Finishing Bldg., paint booth (zinc phosphate coating line)	NA
4681-E3, E4	4681-3S, 4681-4S	Metal Finishing Bldg., paint booths (2)	NA
4701-E10 through 4701-E15	4701-10S through 4701-15S	Wire Spray Aluminum Facility, aluminum flame spray booths (6)	NA
4702-E1	4702-1S	Paint Spray Bldg., antenna paint booth	NA
4730-E9	Building vents	Grit Blast & Paint Facility, north paint room	NA
4730-E10	Building vents	Grit Blast & Paint Facility, south paint room	NA
P-SHIPSPRAY	NA	Outside Ship Painting	NA
P-SHIPBRUSH	NA	General facility-wide operations, brush, roller, and touch-up application on ships and ship parts	
P-FAC	NA	General facility-wide operations, brush, roller, and touch-up application on non-ship parts	NA
274-E13	274-13S	Plate Preparation & Inspection, paint booth	NA
275-E4	275-4S	Shape Preparation, paint booth	NA
275-E6	275-6S	Shape Preparation, paint booth	NA
1746-E4	1746-4S	Plate Preparation & Inspection, paint booth	NA
64-E4, 64-E6, 64-E7	64-2S, 64-3S, 64-4S	Electric Shop, paint booths (3)	NA
64-E1	64-S1	Electrical Shop drill press/sander (not used for wood)	NA
64-E2	64-S2	Electrical Shop saw	NA
64-E9	64-S9	Grinding metal	NA
64-E5	Building vents	Electrical Shop - Baron-Blakeslee Model DP8-3636 vapor degreaser	NA
60-E2	60-S2	Grinding operations	NA
60-E3	60-S3	Buffing operations	NA
114-E1	114-S1	Saw metals	NA
5-E1	5-S1	Grinding metal	NA
FAC-PW	Building vents	Facility-wide parts washer operations	NA
FAC-BLST	NA	External abrasive blasting - facility-wide	NA
GRIT-E1	NA	Utility grit off-loading	NA

17-E20	17-S20	Abrasive blasting/sand and glass	NA
4730-E1 through 4730-E4	Building vents	Abrasive blasting/steel shot - north room	NA
4730-E5 through 4730-E8	Building vents	Abrasive blasting/steel shot - south room	NA
201-E1	201-S1	Abrasive blasting/steel shot	NA
Port-E1	Port-S1	Abrasive blasting/steel shot	NA
Port-E2 through Port E-3	Port-S2 through Port-S3	Abrasive blasting/utility grit	NA
Port-E4 through Port E-24	Port-S4 through Port-S24	Abrasive blasting/utility grit	NA
Port-E25	Port-S25	Abrasive blasting/utility grit	NA
Port-E26 through Port-E31	Port-S26 through Port-S31	Abrasive blasting/utility grit	NA
4701-E1 through 4701-E8	4701-S1 through 4701-S8	Abrasive blasting/aluminum oxide	NA
4701-E9	4701-S9	Abrasive blasting/steel shot	NA
1768-E1	1768-S1	Grinding/cutting/welding - Welding School	NA
FAC-WELD	NA	Welding - facilitywide	NA
250-E1	250-S1	Welding/lead caulking operations	NA
263-E1	263-S1	Welding operations	NA
4677-E1	4677-S1	Welding operations	NA
250-E2	NA	Arc gouger operations	NA
FAC-GLUE	NA	Gluing operations - facilitywide	NA
4619-E1	NA	Sludge dryer - electric	NA
501-E5	501-S5	Asbestos cutting	NA
75-E5	75-S5	Asbestos & non-asbestos cutting of gaskets	NA
74-E1	74-S1	Polyethylene cutting	NA
FAC-SOLV	NA	Solvent/thinner usage - facilitywide	NA
175-E1	NA	Fiberglass operations	NA
SS-E1 through SSE2	NA	Service stations - gasoline	NA
50-E1	50-S1	Wheelabrator Table (Blast Unit) - Abrasive blasting	NA
5-E2	5-S2	Wheelabrator/Tumblast Machine (Blast Unit) - Abrasive blasting	NA
25-E1	25-S1	Melamine Operations (2 Milling Machines, Band Saw, and Lathe)	NA
205-PDR	NA	Nordson Powder Booth	2,160 pounds per hour
205-B1 through B2	205-S1, 205-S2	Powder coating steel shot blast units (2)	NA

NA = not available

Title V Significant Unit Tanks

Tank Number	Contents	Capacity (gallons)	Year Installed
V700*	#6 Fuel Oil	124,203	1985
V701*	#6 Fuel Oil	124,203	1985
V702*	#6 Fuel Oil	93,884	1985
V703*	#6 Fuel Oil	93,884	1985
V704*	#6 Fuel Oil	60,373	1985
V705*	#6 Fuel Oil	60,373	1985

*"V" series tanks are on a floating barge "Vessel", but supply permitted boiler sources.

2. Combustion Sources

Emission Unit No.	Stack No.	Emission Unit Description	Manufacturer and Date of Construction	Size/Rated Capacity (MMBTU/Hour)
FTSF-E1	FTSF-S1	No. 6 fuel oil-fired boiler, barge	Combustion Engineering Model V2M-8, pre-1983	213.26
FTSF-E2	FTSF-S2	No. 6 fuel oil-fired boiler, barge	Combustion Engineering Model V2M-8, pre-1983	213.26
78-E1	78-S1	Boiler #1, No. 6 fuel oil or recovered oil-fired boiler	B&W Integral Furnace, pre-1972	135
78-E2	78-S1	Boiler #2, No. 6 fuel oil or recovered oil-fired boiler	B&W Integral Furnace, pre-1972	135
78-E3	78-S1	Boiler #3, No. 6 fuel oil or recovered oil-fired boiler	B&W Integral Furnace, pre-1972	135
276-EF1	276-S2	Propane-fired furnace	Ray Campbell Furnace, construction date unknown	15.4
276-EF2	276-S3	Propane-fired furnace	Ray Campbell Furnace, construction date unknown	15.4
1278-E1	1278-S1	No. 2 fuel oil-fired oven, Northside	R.S. Annealing Oven, construction date unknown	20.79

3. Pollution Control Equipment

Emission Unit No.	Stack No.	Device Reference Number	Controlled Pollutant	Control Equipment Description ¹
550-E1	550-S1	550-C1	PM	Baghouse, Carborundum Model 264CT-2 (7 modules), 99.0% design control efficiency
550-E2	550-S1	550-C1	PM	Baghouse, Carborundum Model 264CT-2 (7 modules), 99.0% design control efficiency
550-E3	550-S1	550-C1	PM	Baghouse, Carborundum Model 264CT-2 (7 modules), 99.0% design control efficiency
550-E4	550-S1	550-C1	PM	Baghouse, Carborundum Model 264CT-2 (7 modules), 99.0% design control efficiency
550-E11	550-S11	550-C11	PM	Baghouse, Standard Havens Alpha Mark III, Size 24H, 95.0% design control efficiency
550-EF3	550-S11	550-C11	PM	Baghouse, Standard Havens Alpha Mark III, Size 24H, 95.0% design control efficiency
555-E1	550-S11	550-C11	PM	Torit Dust collector, 95.0% design control efficiency
550-E20	550-S20	550-C20	PM	Bag filter, 95.0% design control efficiency
550-E21	550-S21	550-C21	PM	Cyclone, 70.0% (estimated) control efficiency
274-E1	274-S1	274-C1	PM	Baghouse, Wheelabrator #19, Model 126D, 95.0% design control efficiency
275-E5	275-S5	275-C5	PM	Baghouse, Pangborn C70, Type CM, 95.0% design control efficiency
275-E8	275-S8	275-C8	PM	Filter (paper), 90.0% design control efficiency
288-E1 & 288-E4	288-S1 and 288-S2	288-C1	PM	Baghouses, Cox #10-2, Type T (2 units), 95.0% design control efficiency, each
288-E2 & 288-E3	288-S3	288-C2	PM	Baghouse, Cox #9-2, Type T (1 unit), 95.0% design control efficiency, each
4582-E1 through 4582-E6	4582-S1	4582-C1	PM	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency
4582-E1 through 4582-E6	4582-S2	4582-C2	PM	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency
LS-E1	LS-S1	LS-C1	PM	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency
3-E1	3-S1	3-C1	PM	Cyclone, 90.0% design control efficiency
501-E2	501-S2	501-C2	PM	Cyclone, 90.0% design control efficiency
513-E1	513-S1	513-C1	PM	Cyclone, 90.0% design control efficiency
PLATE-E1 through PLATE-E2	PLATE-S1	PLATE-C1	PM	Mechanical scrubber, Zenon packed tower scrubber, 98.0% design control efficiency
232-E1	232-1S1 through 232-1S6	232-1C	PM10	Water wash curtain, Binks Dynaprecipitator, 98.0% design control efficiency
232-E2	232-2S	232-2C	PM10	Water wash curtain, Binks Dynaprecipitator, 98.0% design control efficiency
4681-E2	4681-2S	4681-2C	PM10	Water wash curtain, Greenline Corporation, 98.0% design control efficiency
4681-E3	4681-3S	4681-3C	PM10	Water wash curtain, Greenline Corporation, 98.0% design control efficiency

¹ Control equipment description is provided for descriptive purposes only. Options on type of required pollution control equipment may be exercised without a permit modification as long as the equipment complies with the appropriate applicable requirement.

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4681-E4	4681-4S	4681-4C	PM10	Mechanical scrubber, mist eliminator, and filter (paper) in series, Greenline Corporation, 98.0% design control efficiency
4701-E12	4701-12S	4701-12C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E13	4701-13S	4701-13C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E14	4701-14S	4701-14C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E15	4701-15S	4701-15C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E10	4701-10S	4701-10C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E11	4701-11S	4701-11C	PM10	Water wash curtain, 98.0% design control efficiency
4702-E1	4702-1S	4702-1C	PM10	Filter (paper), JBI Automatic Spray Booth, 90.0% design control efficiency
4730-E9	Building vents	4730-9C	PM10	Filter (paper), 90.0% design control efficiency
4730-E10	Building vents	4730-10C	PM10	Filter (paper), 90.0% design control efficiency
274-E13	274-13S	274-13C	PM10	Dry filter (paper), 90.0% design control efficiency
275-E4	275-4S	275-4C	PM10	Water wash curtain, Binks Water Curtain, 98.0% design control efficiency
275-E6	275-6S	275-6C	PM10	Water wash curtain, Binks Water Curtain, 98.0% design control efficiency
1746-E4	1746-4S	1746-4C	PM10	Filter (paper), Grief, Suenska Maslea, 90.0% design control efficiency
64-E2	64-2S	64-2C	PM10	Filter (paper), 90.0% design control efficiency
64-E3	64-3S	64-3C	PM10	Filter (paper), 90.0% design control efficiency
64-E4	64-4S	64-4C	PM10	Filter (paper), 90.0% design control efficiency
64-E1	64-S1	64-C1	PM	Baghouse, 95.0% design control efficiency
64-E2	64-S2	64-C2	PM	Baghouse, 95.0% design control efficiency
64-E9	64-S9	64-C9	PM	Cyclone, 90.0% design control efficiency
60-E2	60-S2	60-C2	PM	Cyclone, 90.0% design control efficiency
60-E3	60-S3	60-C3	PM	Cyclone, 90.0% design control efficiency
114-E1	114-S1	114-C1	PM	Baghouse, 95.0% design control efficiency
5-E1	5-S1	5-C1	PM	Cyclone, 90.0% design control efficiency
17-E20	17-S20	17-C20	PM	Baghouse, 95.0% design control efficiency
4730-E1 through 4730-E4	Building vents	4730-C1 through 4730-C4	PM	Baghouses (4 units), 95.0% design control efficiency, each
4730-E5 through 4730-E8	Building vents	4730-C5 through 4730-C8	PM	Baghouses (4 units), 95.0% design control efficiency, each
201-E1	201-S1	201-C1	PM	Baghouse, Wheelabrator Dustube Model 112-AC, 95.0% design control efficiency
Port-E1	Port-S1	Port-C1	PM	Baghouse, Standard Havens 12SH Alpha Mark III, 95.0% design control efficiency
Port-E2 through Port-E3	Port-S2 through Port-S3	Port-C2 through Port-C3	PM	Baghouse, Torrit Model MTD-48-LD, 95.0% design control efficiency
Port-E4 through Port-E24	Port-S4 through Port-S24	Port-C4 through Port-C24	PM	Baghouses (21 units), Vacublast Co. Model D6 or D6S-8W, 95.0% design control efficiency, each
Port-E25	Port-S25	Port-C25	PM	Baghouse, MISCO/IPEC custom-made unit, 95.0% design control efficiency

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Port-E26 through Port-E31	Port-S26 through Port-S31	Port-C26 through Port-C31	PM	Baghouses (6 units), MISCO/IPEC custom-made units, 95.0% design control efficiency, each
Port-L-E1	Port-L-S1	Port-L-C1	PM	Cartridge dust collectors
Port-L-E2	Port-L-S2	Port-L-C2	PM	Cartridge dust collectors
4701-E1 through 4701-E8	4701-S1 through 4701-S8	4701-C1 through 4701-C8	PM	Baghouses (8 units), MISCO/IPEC custom-made units, 95.0% design control efficiency, each
4701-E9	4701-S9	4701-C9	PM	Baghouse, Model SS-800E, and Cyclone, Industrial Cleaning Machines, 95.0% design control efficiency, each
276-E3	276-S6	276-C3	PM	Torit dust collector, 95% design control efficiency
1768-E1	1768-S1	1768-C1	PM	Cyclone, 90.0% design control efficiency
250-E1	250-S1	250-C1	PM	Fabric filter, Portable Hawley TRAV-L vent fabric filter with HEPA filter dust collector, 95.0% design control efficiency
263-E1	263-S1	263-C1	PM	Fabric filter, Portable Hawley TRAV-L vent fabric filter with HEPA filter dust collector, 95.0% design control efficiency
4677-E1	4677-S1	4677-C1	PM	Baghouse, 95.0% design control efficiency
501-E5	501-S5	501-C5	PM	Fabric filter, design control efficiency unknown
205-B1 through B2	205-S1 and 205-S2	205-C1	PM	Pangborn PC2-4, design control efficiency 99.9%; BCP Wheelabrator, 4 JPSC 24, 99.9% design control efficiency
206-C1	206-S1	206-C1	VOC	Direct Flame Afterburner, Steelman 4.56.54 BA-C, 99.0% design control efficiency
50-E1	50-S1	50-C1	PM	Baghouse Dustube, Wheelabrator Model 112-AC, 95.0% design control efficiency
5-E2	5-S2	5-C2	PM	Baghouse, Pangborn Model 25-5-8 Type HP-1, 95.0% design control efficiency
25-E1	25-S1	25-C1	PM	Baghouse, Torit, 95.0% design control efficiency
75-E5	75-S5	75-C5	PM	Dust Collector work bench, Torrit Model DD or Model 130, design control efficiency unknown
74-E1	74-S1	74-C1	PM	Baghouse, 95.0% design control efficiency

C. Emission Unit Specific Permit Terms (Federally Enforceable)

1. Combustion Sources

a. Limitations

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
FTSF-E1	No. 6 fuel oil-fired boiler	SO ₂	2.23 lbs/mmBtu and 2.1% sulfur fuel oil	Specific Conditions 5 and 7, permit dated 1/13/85
FTSF-E1	No. 6 fuel oil-fired boiler	PM10	PM10 emissions shall not exceed E lbs/mmBtu as calculated by the equation E=1.0906H ^{-0.2594} , where H is the rated capacity in mmBtu/hour	9 VAC 5-40-900
FTSF-E2	No. 6 fuel oil-fired boiler	SO ₂	2.23 lbs/mmBtu and 2.1% sulfur fuel oil	Specific Conditions 5 and 7, permit dated 1/13/85
FTSF-E2	No. 6 fuel oil-fired boiler	PM10	PM10 emissions shall not exceed E lbs/mmBtu as calculated by the equation E=1.0906H ^{-0.2594} , where H is the rated capacity in mmBtu/hour	9 VAC 5-40-900
78-E1	Boiler #1, No. 6 fuel oil or recovered oil-fired boiler	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-80
78-E1	Boiler #1, No. 6 fuel oil or recovered oil-fired boiler	SO ₂	2.23 lbs/mmBtu and 2.1% sulfur fuel oil	Specific Conditions 5 and 7, permit dated 1/13/85
78-E1	Boiler #1, No. 6 fuel oil or recovered oil-fired boiler	PM10	PM10 emissions shall not exceed E lbs/mmBtu as calculated by the equation E=1.0906H ^{-0.2594} , where H is the rated capacity in mmBtu/hour	9 VAC 5-40-900
78-E2	Boiler #2, No. 6 fuel oil or recovered oil-fired boiler	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-80
78-E2	Boiler #2, No. 6 fuel oil or recovered oil-fired boiler	SO ₂	2.23 lbs/mmBtu and 2.1% sulfur fuel oil	Specific Conditions 5 and 7, permit dated 1/13/85
78-E2	Boiler #2, No. 6 fuel oil or recovered oil-fired boiler	PM10	PM10 emissions shall not exceed E lbs/mmBtu as calculated by the equation E=1.0906H ^{-0.2594} , where H is the rated capacity in mmBtu/hour	9 VAC 5-40-900
78-E3	Boiler #3, No. 6 fuel oil or recovered oil-fired boiler	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-80
78-E3	Boiler #3, No. 6 fuel oil or recovered oil-fired boiler	SO ₂	2.23 lbs/mmBtu and 2.1% sulfur fuel oil	Specific Conditions 5 and 7, permit dated 1/13/85
78-E3	Boiler #3, No. 6 fuel oil or recovered oil-fired boiler	PM10	PM10 emissions shall not exceed E lbs/mmBtu as calculated by the equation E=1.0906H ^{-0.2594} , where H is the rated capacity in mmBtu/hour	9 VAC 5-40-900

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Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
276-EF1	Propane-fired furnace	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-80
276-EF1	Propane-fired furnace	SO ₂	2.64 lbs/mmBtu	9 VAC 5-40-930
276-EF1	Propane-fired furnace	PM10	PM10 emissions shall not exceed E lbs/mmBtu as calculated by the equation E=1.0906H ^{-0.2594} , where H is the rated capacity in mmBtu/hour	9 VAC 5-40-900
276-EF2	Propane-fired furnace	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-80
276-EF2	Propane-fired furnace	SO ₂	2.64 lbs/mmBtu	9 VAC 5-40-930
276-EF2	Propane-fired furnace	PM10	PM10 emissions shall not exceed E lbs/mmBtu as calculated by the equation E=1.0906H ^{-0.2594} , where H is the rated capacity in mmBtu/hour	9 VAC 5-40-900
1278-E1	No. 2 fuel oil-fired oven, Northside	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-80
1278-E1	No. 2 fuel oil-fired oven, Northside	SO ₂	2.64 lbs/mmBtu	9 VAC 5-40-930
1278-E1	No. 2 fuel oil-fired oven, Northside	PM10	PM10 emissions shall not exceed E lbs/mmBtu as calculated by the equation E=1.0906H ^{-0.2594} , where H is the rated capacity in mmBtu/hour	9 VAC 5-40-900

1. Emissions of SO₂ and PM-10 from each of the combustion sources at the facility shall not exceed the limitations specified in Table C.1.a.
(9 VAC 5-80-110)
2. The two barge-mounted boilers combined (FTSF-1 and FTSF-2) shall consume no more than 5 x 10⁶ gallons of No. 6 fuel oil per year, calculated monthly as the sum of each consecutive 12-month period.
(Specific Condition 4 of the 1/30/85 permit)
3. Boilers FTSF-1, FTSF-2, 78-1, 78-2, and 78-3 combined shall consume no more than 14.85 x 10⁶ gallons of No. 6 fuel oil per year, calculated monthly as the sum of each consecutive 12-month period.
(Specific Condition 4 of the 1/30/85 permit)
4. The approved fuel for the barge-mounted boilers (FTSF-1 and FTSF-2) is No. 6 fuel oil. A change in the fuel may require a permit to modify and operate.
(Specific Condition 6 of the 1/30/85 permit)
5. The nominal sulfur content of the No. 6 fuel oil to be burned in all of the shipyard boilers shall not exceed 2.1 percent by weight. Newport News Shipbuilding shall maintain records of all No. 6 fuel oil shipments purchased, indicating sulfur content per shipment. These records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(Specific Condition 7 of the 1/30/85 permit)

b. Testing

6. No specific testing requirements are imposed on the combustion sources for these applicable requirements. Compliance with each limitation shall be based on compliance with the monitoring, recordkeeping, and reporting provisions of this section.
(9 VAC 5-80-110 B)

c. Monitoring

7. Emissions of SO₂ and PM-10 from the combustion units shall be monitored by keeping records of throughput, type of fuel used, and appropriate data on fuel properties. The permittee shall calculate emissions of SO₂ and PM-10 in pounds per million Btu daily using daily fuel throughputs, fuel sulfur contents, and appropriate emission factors from AP-42, 5th Edition. In lieu of a daily calculation, the permittee may make a one-time demonstration of maximum potential SO₂ and PM-10 emissions in pounds per million Btu using maximum fuel throughput, fuel sulfur content, and appropriate emission factors from AP-42 5th Edition. The permittee shall maintain records of daily calculations for the most recent 5-year period. If the one-time maximum emission demonstration option is chosen, the permittee shall maintain a record of such a demonstration for the life of the affected units.
(9 VAC 5-80-110 B)
8. The permittee shall monitor visible emissions from each unit in Table C.1.a. to which a visible emissions standard applies. The permittee shall perform a visible emissions evaluation on the stack of Units 78-E1, 78-E2, and 78-E3 once per month when in operation utilizing EPA Method 9 (reference 40 CFR 60, Appendix A). The permittee shall perform a visible emissions evaluation on the stacks of Units 276-EF1, 276-EF2, and 1278-E1 once per month when the units are in operation. The permittee shall evaluate and record levels of opacity in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 E)

d. Reporting

9. The permittee shall submit an annual emission report to the Director, Tidewater Regional Office. The report shall cover the most recent 12 calendar month period. The report shall be filed in accordance with the reporting requirements in the Facility-Wide and General Conditions of this permit.
(9 VAC 5-80-110 F)

e. Recordkeeping

10. The permittee shall maintain records all No. 6 fuel oil shipments purchased, indicating sulfur content per shipment and monthly fuel throughput records for Units FTSF-1 and FTSF-2 (combined) and Units FTSF-1, FTSF-2, 78-1, 78-2, and 78-3 (combined). These records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)
11. The permittee shall maintain records of all visible emissions evaluations and all emission calculations required by this section. These visible emissions evaluation records and monthly emissions calculations shall be maintained at the facility for inspection by DEQ for the most recent 5-year period. If a one-time emissions calculation is performed to demonstrate compliance with the SO₂ and PM-10 limitations outlined in this section, the permittee shall maintain a record of such demonstration for the life of the affected units.
(9 VAC 5-80-110 F)

2. Foundry Operations

a. Limitations

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
550-E1	Argon/Oxygen Degassing Furnace, Capacity = 60,000 lbs/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 30%	9 VAC 5-50-60
550-E1	Argon/Oxygen Degassing Furnace	PM	42.0 lbs/hour	9 VAC 5-40-2410
550-E2	Electric Arc Furnace No. 1, Capacity = 15,000 lbs/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E2	Electric Arc Furnace No. 1	PM	20.875 lbs/hour	9 VAC 5-40-2410
550-E3	Electric Arc Furnace No. 2, Capacity = 50,000 lbs/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E3	Electric Arc Furnace No. 2	PM	42.0 lbs/hour	9 VAC 5-40-2410
550-E4	Electric Arc Furnace No. 3, Capacity = 50,000 lbs/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E4	Electric Arc Furnace No. 3	PM	42.0 lbs/hour	9 VAC 5-40-2410
550-EF3	Riser Burn Area, Capacity = 60,000 lbs/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-EF3	Riser Burn Area	PM	42.0 lbs/hour	9 VAC 5-40-2410
550-E6	Core Sand Dryer, Capacity = 10,000 lbs/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E6	Core Sand Dryer	PM	16.65 lbs/hour	9 VAC 5-40-2410
550-E8	Heat Treating Oven, Capacity = 10,000 lbs/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E8	Heat Treating Oven	PM	16.65 lbs/hour	9 VAC 5-40-2410
550-E9	Heat Treating Oven, Capacity = 10,000 lbs/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E9	Heat Treating Oven	PM	16.65 lbs/hour	9 VAC 5-40-2410
550-E10	Abrasive Saw, Capacity = 12.5 tons/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E10	Abrasive Saw	PM	27.0 lbs/hour	9 VAC 5-40-2410
550-E11	Sand Reclaim Operations, Capacity = 12.5 tons/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E11	Sand Reclaim Operations	PM	27.0 lbs/hour	9 VAC 5-40-2410

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
550-E12	Riser Burn Area	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E12	Riser Burn Area	PM	42.0 lbs/hour	9 VAC 5-40-2410
550-E20	Steel Shot Abrasive Blasting, Capacity = 30 tons/hour	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E20	Steel Shot Abrasive Blasting	PM	42.0 lbs/hour	9 VAC 5-40-2410
550-E21	Sawing Operation	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
550-E21	Sawing Operation	PM	42.0 lbs/hour	9 VAC 5-40-2410
555-E1	New Sand Operations, Capacity = 100 tons	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60
555-E1	New Sand Operations	PM	42.0 lbs/hour	9 VAC 5-40-2410

(9 VAC 5-40-2410, 9 VAC 5-40-2430, 9 VAC 5-40-60, and 9 VAC 5-80-110 B)

12. Particulate emissions from each of the units in the foundry operation shall not exceed the limitations specified in Table C.2.a.
 (9 VAC 5-80-110)

b. Testing

13. No specific testing requirements are imposed on the Foundry Operations for the applicable requirements in Table C.2.a. Compliance with each limitation shall be based on the provisions outlined in the Statement of Legal and Factual Basis.
(9 VAC 5-80-110 B)

c. Monitoring

14. The permittee shall monitor visible emissions from all points venting to ambient air from any of the units in Table C.2.a. once per month and record observed levels of opacity in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period. If an excess opacity condition exists, the permittee shall determine the cause of the condition and take immediate corrective action. All observed excess opacity conditions shall be recorded in a logbook.
(9 VAC 5-80-110 E)

d. Reporting

15. No specific reporting requirements are imposed on the Foundry Operations for the applicable requirements in Table C.2.a. unless otherwise specified in the reporting requirements in the Facility-Wide and General Conditions of this permit.
(9 VAC 5-80-110 F)

e. Recordkeeping

16. The permittee shall maintain records of the total annual throughput of steel scrap for the foundry. Such records shall be updated monthly as the sum of each consecutive 12-month period and shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)
17. The permittee shall maintain records of all visible emissions evaluations required by this section. These records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)

3. Steel Preparation and Fabrication Operations

a. Limitations

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
274-E1	Abrasive Shot Blasting	PM	36.61 lbs/hour	9 VAC 5-40-260
274-E1	Abrasive Shot Blasting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
275-E5	Abrasive Shot Blasting	PM	7.58 lbs/hour	9 VAC 5-40-260
275-E5	Abrasive Shot Blasting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
276-E3	Wire Brush Paint Removal	PM	Exempt	9 VAC 5-40-260
276-E3	Wire Brush Paint Removal	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
288-E1&E4	Abrasive Blasting	PM	7.58 lbs/hour	9 VAC 5-40-260
288-E1&E4	Abrasive Blasting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
288-E2	Abrasive Blasting	PM	7.58 lbs/hour	9 VAC 5-40-260
288-E2	Abrasive Blasting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
288-E3	Abrasive Blasting	PM	7.58 lbs/hour	9 VAC 5-40-260
288-E3	Abrasive Blasting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
1746-E2	Abrasive Blasting/Steel Shot	PM	7.58 lbs/hour	9 VAC 5-40-260
1746-E2	Abrasive Blasting/Steel Shot	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
276-E3PC	Plasma Cutting	PM	Exempt	9 VAC 5-40-260
276-E3PC	Plasma Cutting	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
50-E1	Wheelabrator Table (Blast Unit)	PM	7.58 lbs/hour	9 VAC 5-40-260
50-E1	Wheelabrator Table (Blast Unit)	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
5-E2	Wheelabrator/Tumblast Machine (Blast Unit)	PM	7.58 lbs/hour	9 VAC 5-40-260
5-E2	Wheelabrator/Tumblast Machine (Blast Unit)	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60
4730-E1-E8	Abrasive Blasting - Steel Shot	PM	7.58 lbs/hour	9 VAC 5-40-260
4730-E1-E8	Abrasive Blasting - Steel Shot	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-320 referencing 9 VAC 5-40-60

18. Particulate emissions from each of the units in Table C.3.a. shall not exceed the limitations specified in Table C.3.a.
(9 VAC 5-80-110 B)

b. Testing

19. No specific testing requirements are imposed on the units in Table C.3.a. for these applicable requirements. Compliance with each limitation shall be based on the provisions outlined in the Statement of Legal and Factual Basis.
(9 VAC 5-80-110 B)

c. Monitoring

20. The permittee shall monitor visible emissions from each unit in Table C.3.a. that vents to the atmosphere once per month utilizing EPA Method 9 (reference 40 CFR 60, Appendix A). The permittee shall evaluate and record levels of opacity in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 E)

d. Reporting

21. No specific reporting requirements are imposed on the Steel Preparation & Fabrication Operations for the applicable requirements in Table C.3.a. unless otherwise specified in the reporting requirements in the Facility-Wide and General Conditions of this permit.
(9 VAC 5-80-110 F)

e. Recordkeeping

22. The permittee shall maintain records of the annual throughput of abrasive blast media in tons for each of the Steel Preparation and Fabrication Operations activities listed in Table C.3.a. The monthly abrasive blast media throughput in tons shall be recorded and maintained in a logbook for each calendar month such that the annual throughput in tons can be calculated as the sum of each consecutive 12-month period. Such records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)
23. The permittee shall maintain records of all visible emissions evaluations required by this section. These records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)

4. Secondary Lead Processing

a. Limitations

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
4582-E1 through E6	Secondary Lead Processing Units, combined	PM	0.6 lbs/hour and 2.4 tons/year	Specific Condition 3 of the 12/16/81 permit
4582-E1 through E6	Secondary Lead Processing Units, combined	LEAD	0.2 lbs/hour and 0.9 tons/year	Specific Condition 4 of the 12/16/81 permit
4582-E1 through E6	Secondary Lead Processing Units, each	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2430 referencing 9 VAC 5-40-60

(9 VAC 5-80-110 B, 9 VAC 5-40-320, and the permit dated 12/16/81)

24. The annual throughput of lead in the Secondary Lead Processing operations shall not exceed 1,500 tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110 and Specific Condition 2 of the 12/16/81 permit)
25. Particulate and lead emissions from Secondary Lead Processing shall not exceed the limitations specified in Table C.4.a.
(9 VAC 5-80-110, 9 VAC 5-40-2410.A, and Conditions 3 and 4 of the 12/16/81 permit)

b. Testing

26. No specific testing requirements are imposed on the Secondary Lead Processing operations for these applicable requirements. Compliance with each limitation in Table C.4.a. shall be based on compliance with the monitoring, recordkeeping, and reporting provisions of this section and emissions calculation demonstrations of compliance in the Statement of Legal and Factual Basis.
(9 VAC 5-80-110 B)

c. Monitoring

27. The permittee shall monitor the throughput of lead (in tons) processed on a monthly basis and record the monthly throughput of lead in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 E)
28. The permittee shall monitor visible emissions from each unit in the Secondary Lead Processing operation once per week when in operation. If any visible emissions are noted, the permittee shall take corrective action and document the visible emission incident in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110)

d. Reporting

29. No specific reporting requirements are imposed on the Secondary Lead Processing operations for the applicable requirements in Table C.4.a. unless otherwise specified in the reporting requirements in the Facility-Wide and General Conditions of this permit.
(9 VAC 5-80-110 F)

e. **Recordkeeping**

30. The permittee shall maintain records of the annual throughput of lead in tons for the Secondary Lead Processing operation. The monthly lead throughput in tons shall be recorded and maintained in a logbook for each calendar month such that the annual throughput in tons can be calculated as the sum of each consecutive 12-month period. Such records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)
31. The permittee shall maintain records of all visible emissions evaluations required by this section. These records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)

5. Woodworking Operations

a. Limitations

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
3-E1	Cutting/Planer/Re-saw	PM	0.05 grains per standard cubic foot of exhaust gas	9 VAC 5-40-2270 B
3-E1	Cutting/Planer/Re-saw	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2280 referencing 9 VAC 5-40-60
501-E2	Foundry Pattern Shop - wood cutting machines	PM	0.05 grains per standard cubic foot of exhaust gas	9 VAC 5-40-2270 B
501-E2	Foundry Pattern Shop - wood cutting machines	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2280 referencing 9 VAC 5-40-60
513-E1	Warehouse No. 6 Saws	PM	0.05 grains per standard cubic foot of exhaust gas	9 VAC 5-40-2270 B
513-E1	Warehouse No. 6 Saws	OPACITY	Opacity limited to 20% except for one 6-minute period in each hour in which opacity shall not exceed 60%	9 VAC 5-40-2280 referencing 9 VAC 5-40-60

(9 VAC 5-40-2270, 9 VAC 5-40-2280, and 9 VAC 5-80-110 B)

32. Particulate emissions from Woodworking operations shall not exceed the limitations specified in Table C.5.a. Particulate emissions from Woodworking operations shall be controlled by the use of cyclones.
 (9 VAC 5-40-2270 and 9 VAC 5-80-110)

b. Testing

33. No specific testing requirements are imposed on the Woodworking operations for these applicable requirements. Compliance with each limitation in Table C.5.a. shall be based on compliance with the monitoring, recordkeeping, and reporting provisions of this section.
 (9 VAC 5-80-110 B)

c. Monitoring

34. The permittee shall monitor each of the units in Woodworking operations once per week when in operation for visible emissions. Lack of visible emissions shall indicate compliance with the provisions of 9 VAC 5-40-2270.B. If any visible emissions are noted, the permittee shall take corrective action and document the visible emissions incident in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period. In addition, the permittee shall monitor the cyclones once per month for structural integrity. Cyclone evaluations shall be recorded in a logbook to be maintained at the facility for the most recent 5-year period.
 (9 VAC 5-80-110 E)

d. Reporting

35. No specific reporting requirements are imposed on the Woodworking operations for the applicable requirements in Table C.4.a. unless otherwise specified in the reporting requirements in the Facility-Wide and General Conditions of this permit.
 (9 VAC 5-80-110 F)

e. Recordkeeping

36. The permittee shall maintain records of all visible emissions evaluations and all cyclone structural integrity evaluations required by this section. These records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)

6. Electroplating

a. Limitations

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
PLATE-E1	Hard chromium electroplating tank	Chromium	0.015 mg/dscm	40 CFR 63.342(c)(1)(i)
PLATE-E2	Decorative chromium electroplating tank	Chromium	0.01 mg/dscm	40 CFR 63.342(d)(1)

(40 CFR 63.340 Subpart N and 9 VAC 5-80-110 B)

37. Chromium emissions from Electroplating operations shall not exceed the limitations specified in Table C.6.a. Unless otherwise specified, Electroplating operations are subject to the provisions of 40 CFR 63 Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.
(40 CFR 63.340 and 9 VAC 5-80-110 B)
38. Chromium emissions from the two electroplating tanks (PLATE-E1 and PLATE-E2) shall be controlled by a single packed-bed scrubber.
(40 CFR 63.342(a) and 9 VAC 5-80-110 B)

b. Testing

39. No specific testing requirements are imposed on the Electroplating operations for these applicable requirements. Compliance with each limitation in Table C.6.a. shall be based on compliance with the monitoring, recordkeeping, and reporting provisions of this section.
(9 VAC 5-80-110 B)

c. Monitoring

40. The permittee shall visually inspect the packed-bed scrubber once per calendar quarter to ensure that there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device. The permittee shall note the results of the inspections in a logbook to be maintained at the facility. The logbook shall be made available to DEQ for inspection and shall be current for the most recent 5-year period.
(40 CFR 63.342(f) and 9 VAC 5-80-110 E)
41. The permittee shall visually inspect the back portion of the packed-bed mist eliminator once per calendar quarter to ensure that it is dry and that there is no breakthrough of chromic acid mist. The permittee shall note the results of the inspections in a logbook to be maintained at the facility. The logbook shall be made available to DEQ for inspection and shall be current for the most recent 5-year period.
(40 CFR 63.342(f) and 9 VAC 5-80-110 E)
42. The permittee shall visually inspect the ductwork from each of the two electroplating tanks (PLATE-E1 and PLATE-E2) to the packed-bed scrubber once per calendar quarter to ensure that there are no leaks. The permittee shall note the results of the inspections in a logbook to be maintained at the facility. The logbook shall be made available to DEQ for inspection and shall be current for the most recent 5-year period.
(40 CFR 63.342(f) and 9 VAC 5-80-110 E)
43. If greater than fifty percent (50%) of the scrubber water is drained for maintenance purposes, the permittee shall add fresh makeup water to the top of the packed-bed scrubber basin.
(40 CFR 63.342(f) and 9 VAC 5-80-110 C)

44. The permittee shall monitor and record the velocity pressure at the inlet to the packed-bed scrubber and pressure drop across the scrubber system once per day during operation. The values of inlet velocity pressure and pressure drop shall be noted in a logbook to be maintained at the facility and shall be current for the most recent 5-year period. The recorded values shall be compared to the values for inlet velocity pressure and pressure drop across the scrubber that indicated compliance in initial compliance tests for the packed-bed scrubber. The permittee shall maintain a record of the initial compliance test at the facility for inspection by DEQ for the life of the scrubber system.

(40 CFR 63.343(c)(2) and 9 VAC 5-80-110 E and F)

d. Reporting

45. The permittee shall prepare and submit semi-annual summary reports on the compliance status of the Electroplating facility. The report shall cover the time period including the previous six-month period (January through June and July through December, respectively) and shall include the following information at a minimum:

- (a) The company name and address of the affected source;
- (b) An identification of the operating parameter that is monitored for compliance determination, as required by 40 CFR 63.343(c);
- (c) The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required by 40 CFR 63.347(e);
- (d) The beginning and ending dates of the reporting period;
- (e) A description of the type of process performed in the affected source;
- (f) The total operating time of the affected source during the reporting period;
- (g) A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;
- (h) A certification by a responsible official, as defined in 40 CFR 63.2, that the work practice standards in 40 CFR 63.342(f) were followed in accordance with the operation and maintenance plan for the source;
- (i) If the operation and maintenance plan required by 40 CFR 63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by 40 CFR 63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed;
- (j) A description of any changes in monitoring, processes, or controls since the last reporting period;
- (k) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
- (l) The date of the report.

The permittee shall submit the report to the Director, Tidewater Regional Office no later than August 1 of each calendar year for the January through June time period and no later than February 1 of each calendar year for the July through December time period.

(40 CFR 63.347(g)(3) and 9 VAC 5-80-110 F)

e. Recordkeeping

46. The permittee shall maintain records of all emissions data and operating parameters required by this section to demonstrate compliance. These records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.

(9 VAC 5-80-110 F)

7. Painting/Coating Operations

a. Limitations

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
232-E1, E2	Consolidated Paint Facility, paint booths (2)	VOC, VOHAP	340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings	40 CFR 63.783(a) Subpart II
4681-E2	Metal Finishing Bldg., paint booth (zinc phosphate coating line)	VOC, VOHAP	340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings	40 CFR 63.783(a) Subpart II

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Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
4681-E3, E4	Metal Finishing Bldg., paint booths (2)	VOC, VOHAP	<p>340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings</p>	40 CFR 63.783(a) Subpart II
4701-E10 through 4701-E15	Wire Spray Aluminum Facility, aluminum flame spray booths (6)	VOC, VOHAP	<p>340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings</p>	40 CFR 63.783(a) Subpart II

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Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
4702-E1	Paint Spray Bldg., antenna paint booth	VOC, VOHAP	<p>340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings</p>	40 CFR 63.783(a) Subpart II
4730-E9	Grit Blast & Paint Facility, north paint room	VOC, HAPs	<p>340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings</p>	40 CFR 63.783(a) Subpart II

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Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
4730-E10	Grit Blast & Paint Facility, south paint room	VOC, HAPs	<p>340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings</p>	40 CFR 63.783(a) Subpart II
P-SHIPSPRAY	Outside Ship Painting	VOC, HAPs	<p>340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings</p>	40 CFR 63.783(a) Subpart II

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
P-SHIPBRUSH	General facility-wide operations, brush, roller, and touch-up application on ships and ship parts	VOC, HAPs	340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings	40 CFR 63.783(a) Subpart II
274-E13	Plate Preparation & Inspection, paint booth	VOC, HAPs	340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings	40 CFR 63.783(a) Subpart II

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Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
275-E4	Shape Preparation, paint booth	VOC, HAPs	<p>340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings</p>	40 CFR 63.783(a) Subpart II
275-E6	Shape Preparation, paint booth	VOC, HAPs	<p>340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings</p>	40 CFR 63.783(a) Subpart II

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Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
1746-E4	Plate Preparation & Inspection, paint booth	VOC, HAPs	340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings	40 CFR 63.783(a) Subpart II
64-E4, 64-E6, 64-E7	Electric Shop, paint booths (3)	VOC, HAPs	340 grams VOHAP per liter general use, air flask, inorganic zinc high-build, military exterior, nonskid, rubber camouflage, specialty interior, and undersea weapons systems coatings; 360 grams VOHAP per liter organic zinc coatings; 400 grams VOHAP per liter anti-foulant coatings; 420 grams VOHAP per liter heat resistant, high-gloss, and nuclear coatings; 490 grams VOHAP per liter special marking coatings; 500 grams VOHAP per liter high-temperature coatings; 530 grams VOHAP per liter antenna coatings; 550 grams VOHAP per liter navigational aids and repair and maintenance of thermoplastics coatings; 610 grams VOHAP per liter mist, sealant for thermal spray aluminum, and tack coat coatings; 650 grams VOHAP per liter weld-through preconditioning primer coatings; and 780 grams VOHAP per liter pretreatment wash primer coatings	40 CFR 63.783(a) Subpart II
205-PDR	Powder Coating Facility	PM, VOC, OPACITY	Opacity not to exceed 5 percent as determined by EPA reference Method 9	9 VAC 5-50-80 and Specific Condition 12 of the permit dated 7/10/2000
205-B1 through B2	Powder Coating Facility steel shot blast units (2)	PM	Opacity not to exceed 5 percent as determined by EPA reference Method 9	9 VAC 5-50-80 and Specific Condition 12 of the permit dated 7/10/2000

(9 VAC 5-80-110 B, 9 VAC 5-50-80, and 40 CFR 63.783 Subpart II)

47. VOC and HAP emissions from Painting/Coating operations shall not exceed the limitations specified in Table C.7.a. Unless otherwise specified, VOC and HAP emissions from Painting/Coating operations are subject to the provisions of 40 CFR 63 Subpart II - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating). No owner or operator of any existing or new affected source shall cause or allow the application of any coating to a ship with an as-applied VOHAP content exceeding the applicable limits given in Table 2 of 40 CFR 63 Subpart II, as determined by the procedures described in 40 CFR 63.785 (a), (b), or (c)(1) through (c)(4). For the compliance procedures described in Sec. 63.785 (c)(1) through (c)(3), VOC shall be used as a surrogate for VOHAP, and Method 24 of Appendix A to 40 CFR Part 60 shall be used as the definitive measure for determining compliance. For the compliance procedure described in 40 CFR 63.785(c)(4), an alternative test method capable of measuring independent VOHAP shall be used to determine compliance. The method must be submitted to and approved by DEQ.
(9 VAC 5-80-110 B, and 40 CFR 63.783(a))
48. VOC emissions from the aluminum flame spray facility water curtain booths (Units 4701-E10 and 4701-E11) shall not exceed 40 pounds per day, 8 pounds per hour, and 7 tons per year.
(9 VAC 5-50-260 and Specific Condition 4 of the 2/12/86 permit)
49. Particulate emissions from the Powder Coating Facility steel shot blast units (Units 205-B1 through B2) shall be controlled by cartridge filters. The cartridge filters shall be provided with adequate access for inspection and shall be in operation when the blasting process is operating.
(9 VAC 5-50-260 and Specific Condition 3 of the 7/10/00 permit)

50. Volatile Organic Compound (VOC) emissions from the powder booth shall be controlled by the use of powder coatings. Particulate emissions from the powder booth shall be controlled by total enclosure and capture of any powder coating overspray. A change to liquid coatings may require a permit.
(9 VAC 5-50-260 and Specific Condition 4 of the 7/10/00 permit)
51. The throughput of powder coatings in the Nordson powder booth shall not exceed 9,461 tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-10 H and Specific Condition 9 of the 7/10/00 permit)
52. Visible emissions from the Nordson powder booth shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80 and Specific Condition 12 of the 7/10/00 permit)

b. Testing

53. For the compliance procedures described in 40 CFR 63.785(c)(1) through (c)(3), Method 24 of 40 CFR Part 60, Appendix A is the definitive method for determining the VOC content of coatings, as supplied or as applied. Compliance with each limitation in Table C.7.a. shall be based on compliance with the monitoring, recordkeeping, and reporting provisions of this section.
(40 CFR 63.786(a) and 9 VAC 5-80-110 B)

c. Monitoring

54. For each batch of coating that is received by the facility, the permittee shall determine the coating category, the applicable VOHAP limit as specified in 40 CFR 63.783(a), and certify the as-supplied VOC content as specified in 40 CFR 63.785(a)(2) or (b)(1). The permittee may use a certification supplied by the manufacturer for the batch, although the permittee retains liability should subsequent testing reveal a violation. If the permittee performs the certification testing, only one of the containers in which the batch coating was received is required to be tested. In lieu of testing each batch of coating, as applied, the permittee may determine compliance with the VOHAP limits using any combination of the procedures described in 40 CFR 63.785 Paragraphs (c)(1), (c)(2), (c)(3), and (c)(4). The procedure used for each coating shall be determined and documented prior to application. The permittee shall log such data in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period. The results of any compliance demonstration conducted by the permittee or any regulatory agency using Method 24 shall take precedence over the results using the procedures in 40 CFR 63.785 Paragraphs (c)(1), (c)(2), or (c)(3). The results of any compliance demonstration conducted by the permittee or any regulatory agency using an approved test method to determine VOHAP content shall take precedence over the results using the procedures in 40 CFR 63.785 Paragraph (c)(4).
(40 CFR 63.785(a) and (b) and 9 VAC 5-80-110 E)
55. The permittee shall ensure that all handling and transfer of VOC-containing materials to and from containers, tanks, vats, drums, and piping systems is conducted in a manner that minimizes spills. The permittee shall inspect all containers, tanks, vats, drums, and piping systems once monthly to ensure that they are free of cracks, holes, and other defects. All containers, vats, drums, and piping systems housing VOC-containing materials shall remain closed unless materials are being added to or removed from them. Such procedures shall be documented in the facility's Shipbuilding and Ship Repair NESHAP Implementation Plan dated December 1996.
(40 CFR 63.783(b)(1) and (b)(2), the Shipbuilding and Ship Repair NESHAP Implementation Plan submitted to EPA Region III dated December 1996, and 9 VAC 5-80-110 E)

d. Reporting

56. Before the 60th day following completion of each 6-month period after the compliance date specified in 40 CFR 63.784, the permittee shall submit a VOC report to the Director, Tidewater Regional Office for each of the previous 6 months. The report shall include all of the information that must be retained pursuant to 40 CFR 63.788(b)(2) through (b)(3), except for that information specified in 40 CFR 63.788(b)(2)(i) through (ii), (b)(2)(v), (b)(3)(i)(A), (b)(3)(ii)(A), and (b)(3)(iii)(A). If a violation is detected, the permittee shall also report the information specified in 40 CFR 63.788(b)(4) for the reporting period during which the violation(s) occurred. To the extent possible, the report shall be organized according to the compliance procedure(s) followed each month by the permittee.

(40 CFR 63.788(c) and 9 VAC 5-80-110 F)

e. Recordkeeping

57. The permittee shall maintain records of daily total paint and coating usage in gallons, including VOC content as applied per coating for Units 4701-E10 and 4701-E11. The permittee shall calculate VOC emissions in pounds per hour and pounds per day once per calendar day based on the daily coating usage and VOC content as applied per coating. Daily is defined as the 24-hour period beginning at midnight of each calendar day and ending at 11:59 pm. Utilizing daily VOC emissions calculations, the permittee shall calculate annual VOC emissions in tons per year monthly as the sum of each consecutive 12-month period. Records of emissions calculations shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
- (9 VAC 5-80-110 F)
58. The permittee shall record the total volume of coating applied at the facility to ships. Such records shall be compiled monthly and maintained at the facility for a minimum of 5-years.
- (40 CFR 63.788(b)(1) and 9 VAC 5-80-110 F)
59. The permittee shall compile records on a monthly basis and maintain such records for a minimum of 5-years. Such records shall include, at a minimum:

- (a) All documentation supporting initial notification;
- (b) A copy of the facility's approved implementation plan;
- (c) The volume of each low-usage-exempt coating applied;
- (d) Identification of the coatings used, their appropriate coating categories, and the applicable VOC limit;
- (e) Certification of the as-supplied VOC content of each batch of coating;
- (f) A determination of whether containers meet the standards as described in 40 CFR 63.783(b)(2);
- (g) The results of any Method 24 (as referenced in 40 CFR 60, Appendix A) or approved VOC measurement test conducted on individual containers of coating, as applied; and
- (h) Any additional records as required by 40 CFR 63.788(b)(3) and (b)(4).

(40 CFR 63.788(b)(1) through (b)(4) and 9 VAC 5-80-110 F)

60. **Powder Coating Booth** - The permittee shall maintain records of emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- (a) Monthly and annual throughput (in tons) of powder coatings for each spray booth. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.

These records shall be available for inspection by DEQ and shall be current for the most recent 5-year period.

(9 VAC 5-50-50 and Specific Condition 13 of the 7/10/00 permit)

8. Specialty Shops

a. Limitations

Unit Name	Name/Description of Unit	Pollutants	Description of Applicable Requirement/ Emission Limit/Standard/Work Practice	Citation
64-E1	Electrical Shop drill press/sander (not used for wood)	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
64-E2	Electrical Shop saw	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
64-E9	Grinding metal	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
64-E5	Electrical Shop - Baron-Blakeslee Model DP8-3636 vapor degreaser	VOC	Minimum reduction of 75% by weight of VOCs by use of appropriate control technology guidelines (CTGs) as outlined in 9 VAC 5-40-3290	9 VAC 5-40-3280.B.1
60-E2	Grinding operations	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
60-E3	Buffing operations	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
114-E1	Saw metals	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
5-E1	Grinding metal	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
FAC-PW	Facility-wide parts washer operations	VOC, HAPs	Minimum reduction of 85% by weight of VOCs by use of appropriate control technology guidelines (CTGs) as outlined in 9 VAC 5-40-3290	9 VAC 5-40-3280.C.1
25-E1	Melamine Operations (2 Milling Machines, Band Saw, and Lathe)	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260
250-E2	Arc gouger	PM	$E=4.10P^{0.67}$ where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hr	9 VAC 5-40-260

(9 VAC 5-40-260, 9 VAC 5-40-3280, and 9 VAC 5-80-110 B)

- 61. Particulate and VOC emissions from Specialty Shop operations shall not exceed the limitations specified in Table C.8.a.
 (9 VAC 5-40-260 and 9 VAC 5-80-110 B)
- 62. Cold cleaner parts washers (Unit Ref. No. FAC-PW) shall be equipped with a control method that will remove, destroy, or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions. Open top vapor degreasers (Unit Ref. No. 64-E5) shall be equipped with a control method that will remove, destroy, or prevent the discharge into the atmosphere of at least 75% by weight of volatile organic compound emissions.
 (9 VAC 5-40-3290.B. and C and 9 VAC 5-80-110 B)

63. Achievement of the applicable VOC emission standard for cold cleaner parts washers (FAC-PW) and open top vapor degreasers (64-E5) shall be achieved by complying with the applicable control and operating requirements in 9 VAC 5-40-3290 B and C respectively. Control requirements shall consist of the requirements in 9 VAC 5-40-3290 B.1 and C.1 respectively. Operating requirements shall consist of the requirements in 9 VAC 5-40-3290 B.2 and C.2 respectively.
(9 VAC 5-40-3290.B, 9 VAC 5-40-3290.C, and 9 VAC 5-80-110 B)
64. Disposal of waste solvent from the parts washer solvent metal cleaning operations should be achieved by reclamation (either by outside services or in-house) or by incineration. Disposal records shall be maintained at the facility for the most recent 5-year period.
(9 VAC 5-40-3290.D.)
65. Particulate emissions from the currently permitted arc-gouging process shall be controlled by a dust collector. The dust collector shall be provided with adequate access for inspection. The Torit dust collector shall be equipped with a device to continuously measure the differential pressure drop across the filter cartridges. Pressure drop records shall be observed once per week when in operation to ensure proper operation of the dust collector.
(9 VAC 5-80-10 H and Specific Condition 3 of the 9/2/94 permit)
66. The currently permitted arc gouger shall process no more than 88,000 linear feet of stainless steel per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 and Specific Condition 4 of the 9/2/94 permit)
67. Visible emissions from the currently permitted arc gouger dust collector shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Visible emissions from each of the remaining Specialty Shop activities shall not exceed 20 percent opacity except for one 6-minute period in any one hour of not more than 60 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-40-80, 9 VAC 5-50-80, and Specific Condition 5 of the 9/24/94 permit)

b. Testing

68. No specific testing requirements are imposed on the Specialty Shop or currently permitted arc gouging operations for these applicable requirements. Compliance with each limitation in Table C.8.a. shall be based on compliance with the monitoring, recordkeeping, and reporting provisions of this section.
(9 VAC 5-80-110 B)

c. Monitoring

69. The permittee shall monitor each of the units in Specialty Shop operations once per week when in operation for visible emissions except for the currently permitted arc gouger, the parts washers, and the vapor degreaser. If any visible emissions in excess of normal operations are noted, the permittee shall take corrective action and document the visible emissions incident in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period. The currently permitted arc gouger shall be monitored once per month for visible emissions when in operation utilizing EPA Reference Method 9. All arc gouger visible emissions evaluations shall be noted in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 E)
70. The permittee shall maintain a file of all information required in order to demonstrate compliance with the provisions of this section. The information shall be kept on file for at least the most recent 5-year period.
(9 VAC 5-40-3370, 9 VAC 5-40-50 and 9 VAC 5-80-110 E)

71. The permittee shall inspect each parts washer unit and open top vapor degreaser unit quarterly to ensure compliance with the control requirements of 9 VAC 5-40-3290.B and C. If such inspections indicate any condition of non-compliance, appropriate action shall be taken to correct the problem. Records of inspections and corrective actions taken shall be maintained at the facility for the most recent 5-year period.
(9 VAC 5-80-110 E)
72. At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.
(9 VAC 5-40-20 F and 9 VAC 5-80-110 E)

d. Reporting

73. No specific reporting requirements are imposed on the Specialty Shop operations for the applicable requirements in Table C.8.a. unless otherwise specified in the reporting requirements in the Facility-Wide and General Conditions of this permit.
(9 VAC 5-80-110 F)

e. Recordkeeping

74. The permittee shall maintain records of all visible emissions evaluations required by this section. These records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)
75. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. Such records shall include but are not limited to:
 - (a) The annual throughput of stainless steel catapult plates for the arc gouger in linear feet, calculated monthly as the sum of each consecutive 12-month period;
 - (b) Waste solvent disposal records;
 - (c) Inspection and corrective action records for the parts washers and the vapor degreaser; and
 - (d) Dust collector pressure drop records.All records shall be maintained at the facility for inspection by DEQ for the most recent 5-year period.
(9 VAC 5-80-110 F)

9. Storage Tanks

a. Limitations, Testing, Monitoring, Recordkeeping, and Reporting

76. Based on tank capacities and/or vapor pressures of stored liquids, each of the tanks listed in the Title V Insignificant Unit Tanks Inventory table (page 12) and the Title V Significant Unit Tanks table (page 17) of this document is exempt from the provisions of 40 CFR 60.110b and 9 VAC 5-40-3410.
(9 VAC 5-40-3410, 40 CFR 60.110b, and 9 VAC 5-80-110)

III. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
103-E1	Shop, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
160-E1	Tool Room & Office, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
1744-E2	Detroit Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	979 horsepower
1744-E3	Utility Substation Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	469 horsepower
1744-E4	Natural gas-fired boiler	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	2,343 mmBtu/hr
1744-E5	Natural gas-fired boiler	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	2,343 mmBtu/hr
23-E1	Hull Outfitting & Electrical Shops, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
2-E1	Consolidated Storage, Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
4538-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,048 horsepower
4632-E1	Radcon Control Firehouse, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	324 horsepower
4677-E2	MOF, South, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	80 horsepower
4677-E3	MOF, North, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67 horsepower
4677-E4	MOF, East, Detroit Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	47 horsepower
520-E1	Office, Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67 horsepower
521-E1	Computer & Materials Support, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	603 horsepower
521-E2	Computer & Materials Support, Solar Gas Turbine (diesel-fired for emergency use)	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,073 horsepower
86-E1	Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	235 horsepower
DD10/11-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	469 horsepower
DD12-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	757 horsepower
DD3/4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
DD3-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	335 horsepower
DD3-E2	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	335 horsepower
DD4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	208 horsepower
DD4-E2	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	208 horsepower
FTSF-E3	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	670 horsepower
GEN-E1	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
GEN-E10	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	282 horsepower

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GEN-E11	Fire Dept. #1-port, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	268 horsepower
GEN-E12	Fire Dept. #2-port, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	268 horsepower
GEN-E13	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	188 horsepower
GEN-E14	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	168 horsepower
GEN-E15	Diesel-fired Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	168 horsepower
GEN-E16	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	80 horsepower
GEN-E2	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
GEN-E17	Communications Tower, Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	282 horsepower
GEN-E18	Portable, Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	282 horsepower
GEN-E19	Scrap Yard Fuel Storage Facility, Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	46.9 horsepower
GEN-E20	Ring Module Shop, Denerac Diesel Generator Set	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40.2 horsepower
GEN-E21	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	978.9 horsepower
GEN-E22	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67.1 horsepower
GEN-E23	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67.1 horsepower
GEN-E24	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	11 horsepower
GEN-E25	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	11 horsepower
GEN-E26	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67.1 horsepower
GEN-E27	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40.2 horsepower
GEN-E28	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40.2 horsepower
GEN-E29	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
GEN-E3	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
GEN-E30	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
GEN-E31	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	40 horsepower
GEN-E32	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	67 horsepower
GEN-E33	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	93.9 horsepower
GEN-E4	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	871.7 horsepower
GEN-E5	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	603.5 horsepower
GEN-E6	Cummins/Onan Diesel Generator Set	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	402 horsepower
GEN-E7	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	335 horsepower
GEN-E8	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	335 horsepower
GEN-E9	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	308 horsepower
PIER2-E1	Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	469 horsepower
SHED4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	737 horsepower
GEN-E34	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	47 horsepower
GENP-E1	Portable Generators Rated at equal to or greater than 14 kW	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	<12 horsepower
PUMP-E1	Cummins 6" Portable Emergency Diesel Pump	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	95.2 horsepower
PUMP-E2	Cummins 6" Portable Emergency Diesel Pump	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	95.2 horsepower
NAC-E1	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower

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NAC-E2	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E3	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E4	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E5	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E6	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E7	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E8	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E9	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E10	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E11	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
NAC-E12	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1,475 horsepower
550-E12	R.S. Products Co. Oven, Foundry Annealing	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	9.74 million Btu/hour, propane
550-E14	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.305 million Btu/hour, propane
550-E15	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.2 million Btu/hour, propane
550-E16	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.7 million Btu/hour, propane
550-E17	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.7 million Btu/hour, propane
550-E18	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.7 million Btu/hour, propane
550-E6	Core Sand Dryer	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.4 million Btu/hour, propane
274-E2	Binks Dryer, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.9 million Btu/hour
274-E3	Binks Dryer, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.4 million Btu/hour
274-E4	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.88 million Btu/hour
274-E5	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.56 million Btu/hour
274-E6	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.56 million Btu/hour
274-E7	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.88 million Btu/hour
274-E8	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.562 million Btu/hour
274-E9	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.4 million Btu/hour
274-E10	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.4 million Btu/hour

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274-E11	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	0.4 million Btu/hour
275-E1	Thermal Dryer, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	3.2 million Btu/hour
275-E2	Buffalo Forge - Shape Prep, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.88 million Btu/hour
275-E3	Buffalo Forge - Shape Prep, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	1.88 million Btu/hour
276-E5	Oven, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	2.58 million Btu/hour
1746-E1	Electrolux Paint Dryer - Plate Preparation	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	8.33 million Btu/hour
1746-E3	Oven, Plate Prep, propane	5-80-720 C.4.b.	NO _x , SO ₂ , VOC, PM, CO	8.33 million Btu/hour
4582-E7	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
4582-E8	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
4582-E9	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
4582-E10	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
4582-E11	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.023 million Btu/hour
17-E2	Super heater - Ship Repair Machine Shop	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.6 million Btu/hour
60-E4	Curing Oven - Main Machine Shop (w/filter)	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.175 million Btu/hour
64-E3	Bayco Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1.0 million Btu/hour
205-E1	Oven - Ship Shed No. 3	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.214 million Btu/hour
527-E1	Heat Treating Furnace (No. 2 Oven)	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1.48 million Btu/hour
83-E1 through 83-E3	Heat Treating Ovens	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.175 million Btu/hour, each
4740-E1	Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.183 million Btu/hour
4702-EF2	Dryer	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	1.1 million Btu/hour
205-C1a, 205- C1b, 205-C1c	Parts Washer Burners	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	One burner rated at 2.0 million Btu/hour and two burners rated at 1.3 million Btu/hour each
205-C2	Pre-heat Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	5.5 million Btu/hour
205-C3	Cure Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	5.5 million Btu/hour
PLATE-E4	Chromium strip tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E5	Electrocleaner tank - Cd	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E6	Electrocleaner tank - Cu/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E7	Electrocleaner tank - Cr/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E8	Electrocleaner tank - Cr	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E9	Electropolisher tank - Cr/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E10	Chromic acid tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA

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			hydrogen	
PLATE-E11	Cadmium plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E12	Barrel cadmium plating	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E13	Zinc plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E14	Barrel zinc plating	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E15	Cyanide copper tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E16	Nickel plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E17	Nickel strip tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E18	Dull nickel plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E19	Lead plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E20	Silver strike tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E21	Silver plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E22	Acid copper plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
206-C1	Heat Cleaning Oven	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	0.6 million Btu/hour
4681-E1	Bake Oven at Phosphate Line	5-80-720 C.4.b.	CO, NO _x , SO ₂ , VOC, PM10	4.2 million Btu/hour

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

IV. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
none	none	none

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

V. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable. (9 VAC 5-80-110 N)

B. Permit Expiration

This permit shall become invalid five years from the date of issuance. The permittee shall submit an application for renewal of this permit no earlier than 18 months and no later than six months prior to the date of expiration of this permit. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the DEQ on the renewal application.

(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ. Reports shall cover a period of six months. The reporting periods shall be from the first day of the month to the last day of the sixth month. Reports shall be postmarked or delivered no later than 60 days following the end of the reporting period. The first reporting period shall commence on the first day of the second month following the permit issuance date. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - c. Exceedance of emissions limitations or operational restrictions;
 - d. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - e. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - f. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

1. Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for a period of twelve months. The report shall be postmarked or delivered no later than 60 days following the end of the twelve-month period. The reporting periods shall coincide with the monitoring reporting periods. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the certification.
 - b. The identification of each term or condition of the permit that is the basis of the certification.
 - c. The compliance status.

- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- f. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Tidewater Regional Office, within 4 daytime business hours of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the occurrence, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition V.C.3. of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Director, Tidewater Regional Office, within 4 daytime business hours of the occurrence. In addition, the owner shall provide a written statement, within 14 days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shutdown.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Action for Cause

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
(9 VAC 5-80-110 G.4)
2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
 - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;
 - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;

- c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
- d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
- e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
- f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
- g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year that the permit is effective. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2. b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

VI. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor: 9 VAC 5-50-310
2. State toxics rule: 9 VAC 5-50-320

(9 VAC 5-80-110 N and 9 VAC 5-80-300)

